

# ANTERION® Biometry

## Quality and Plausibility Check

Acquisition quality parameters are marked as **Pass** or **Borderline** and fixation light focus is correct.

	OD	OS
<b>Acquisition</b>		
Mode	Collect	Collect
Date	01.12.2021	01.12.2021
Time	16:01:38	16:04:42
Operator	Head, Head	Head, Head
System test	Valid	Valid
Fixation light focus	0.0 D	0.0 D
Int. fix. light brightness	2	2
<b>Acquisition quality</b>		
Summarized	Pass	Pass
Motion	Pass	Pass
Fixation	Pass	Pass
Test filter and lid	Pass	Pass
Camera image segmentation	Pass	Pass

### Anterior Axial Curvature (3 mm Ring)

$R_{\text{mean}}^{1-7}$	8.02 – 7.57 mm
$\text{SimK}_{\text{mean}}^{1-7}$	42.1 – 44.6 D

A 0.17 mm measurement error will lead to a 1 D postoperative error in a normally proportioned eye.

A difference of > 1 D in **SimK** between both eyes is uncommon.<sup>26</sup>

### Posterior Axial Curvature (3 mm Ring)

$K_{\text{mean}}^{1-10}$	-5.6 – -6.6 D
P/A ratio <sup>20</sup>	0.82 – 0.86

A 1 D **SimK** measurement error will lead to a 1 D postoperative error in a normally proportioned eye.

**P/A ratio** can be altered by laser vision correction. It will decrease after myopic treatments and increase following hyperopic.

### Total Corneal Wavefront (6 mm)

Sph. aberration <sup>21</sup>	0.25 – 0.27 $\mu\text{m}$
RMS HOA <sup>21</sup>	0.45 – 0.48 $\mu\text{m}$

### Pachymetry

CCT (vertex) <sup>1-4, 6-15</sup>	474 – 608 $\mu\text{m}$
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### Anterior Segment

AQD (ACD) <sup>4,15-19</sup>	2.11 – 3.91 mm
<small>Posterior corneal surface to anterior lens surface</small>	
Lens thickness <sup>4, 12-15, 22</sup>	3.43 – 4.77 mm

**Lens thickness** increases with age.<sup>27</sup>

### Axial Length

Length <sup>4,10-15,22</sup>	21.5 – 26.4 mm
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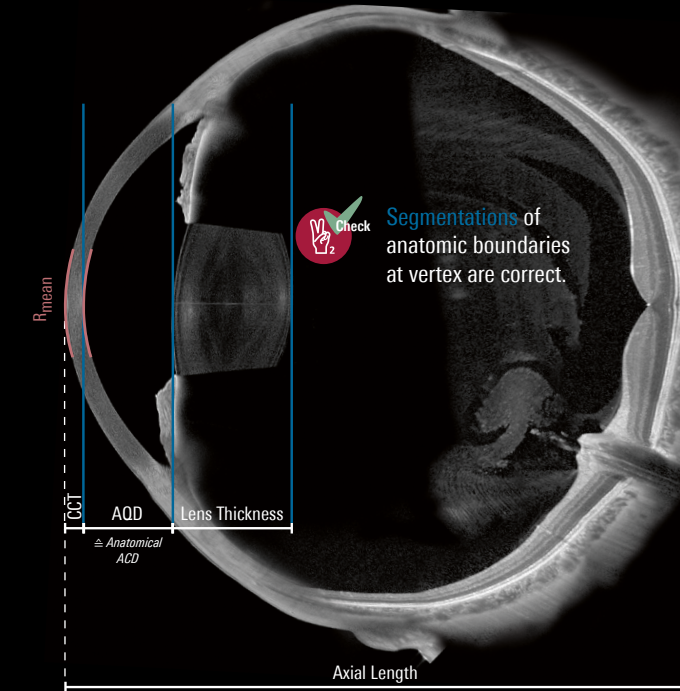
A short **axial length** occurs in axial hyperopia, but may also be caused by, e.g., RPE elevations. Axial myopia is characterized by a long **axial length**.

### White-to-white

WTW <sup>2-4, 12-14, 22-25</sup>	11.0 – 12.8 mm
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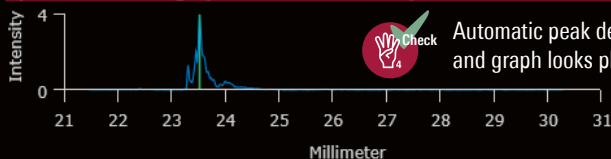
A difference of > 0.5 mm in **axial length** between both eyes is uncommon.<sup>26</sup> Check for anisometropia.

A 1 mm measurement error will result in a 2.7 D postoperative error in a normally proportioned eye.



Axial length: **23.52 mm**  $\pm$  0.002 mm  
 Eye status: No surgery, Phakic, Vitreous only

Standard deviation is < 0.02 mm and eye status is correct.



The OCT eye montage composed of 5 ANTERION and 6 SPECTRALIS images is deliberately not to scale for educational purposes only.

# References

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