

Nocturnal Baseline Assessment

Px Name:

Date:

Motives:

Ave. Hours Slept:

RIGHT

LEFT

BASELINE

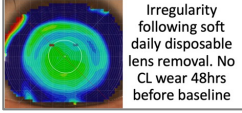
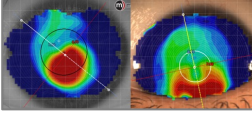
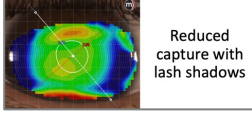
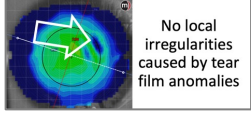
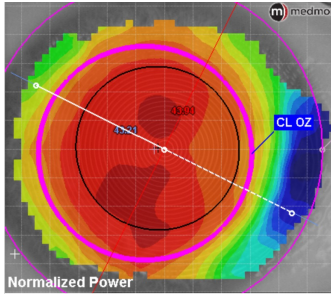
SPH	CYL	AXIS	VA	Rx	SPH	CYL	AXIS	VA
Baseline Cyl may be masked or reduced if corneal astigmatism is central and smaller pupils. Assume similar correction to soft spherical lenses.								
AL:	Power	VA	BVS Rx	Power	VA	AL:		
TOPOGRAPHY BASELINE (No CL wear 48hrs prior, 3 x central fixation e/e) TANGENTIAL STANDARD SCALE [6.7mm(35D) TO 9.4mm(50D)]								
K Flat	K Steep			Sim Ks	K Flat	K Steep		
e Flat	e Steep			Eccentricity	e Flat	e Steep		
Iris Centre:				HVID				Iris Centre:
				Sph Aberr (SA)				
				Quality				
				Ectasia				
AXIAL POWER NORMALIZED SCALE								
				Decentration				
				Symmetry				

Anticipated Outcome Score (for guidance only, lenses can be adjusted after initial fit based on correction and topography to refine fit)

Parameter	Score	0	2	4	8
BVS		< -3.00	-3.25 to -4.50	-4.75 to -6.00	> -6.00
Astigmatism		< -0.75	-0.75 to -1.25	-1.25 to -1.75	> -2.00 [> -1.00 oblique]
Decentration / Iris Centre		< 0.5mm	0.5 to 0.75mm	0.75 to 1.25mm	>1.25mm
HVID		11.2 to 12.4mm	12.4 to 13.0		<10.7 or >13.0
Mono vision		NO	YES	-	-
Anticipated Outcome	Total	Total score 0 to 2 Ideal outcome anticipated. Target correction in a.m. after 2-3 nights. Stable correction after 14 nights. No rRx anticipated. Vision after 2 months equal to soft CLs.	Total score 2 to 4 Suitable candidate. Target correction in a.m. after 5 to 7 nights. Stable correction after 14 nights. Glare may be experienced, this will improve over 2 to 3 months of wear. Minimal impact anticipated from rRx.	Total score 4 to 8 Suitable candidate if rRx acceptable. Target correction on lens removal after 7 nights. Stable correction after 21 nights. Residual refraction may need to be provided in spectacles. Glare will be experienced in certain lighting and dark environments.	Total score >8 Significant rRx expected. Over refraction will be required full time. Generally, an unsuitable candidate.

Order lens at www.scotlens.com

Baseline Assessment

Motives	Lifestyle freedom is a common motive. Patients experience a life with a greater sense of freedom from specs or day lenses. Myopia management is a motive for kids and parents. Soft CL dryness and intolerance a motive. Sports and career benefits. These benefits need to be outweigh any anticipated residual Rx (rRx) or lens adaption over initial weeks wear.																																
Average Hours slept	Generally nightly wear with 5 hours sleep will provide a stable correction. High Rx corrections will be more sensitive to reduced sleep. After a month of wear having a night off can be valuable for the px to see what impact it has on vision.																																
Baseline Rx and BVS	Anticipate a BVS outcome or VA similar to spherical soft CLs. Astigmatism can be reduced in some patients, but if it is not corrected with the initial lenses further lens adjustments are unlikely to improve this significantly. Astigmatism generally comes from the corneal toricity ie the stroma, night lens wear only changes the epithelium hence residual cyl equal to the baseline Rx should be anticipated. Any rRx will be stable by 4 weeks wear and OR specs can be provided. AVOID providing soft lens wear during adaption for any rRx as they massage the epithelium and undo the TZ formation.																																
Baseline Topography	Ensure three full open eye captures with patients fixating central. Patients should blink regularly during capture to avoid tear film drying. No contact lens wear for minimum 48 hours before baseline, 2 weeks for SiHy SCLs, 4 weeks for GP lens wear.																																
Ks	Pxs with normal range 7.3 to 8.3mm should get more predictable initial result. Outliers can expect a less predictable initial outcome. Higher correction is more likely with smaller K (mm) values.																																
Eccentricity	Pxs with normal range 0.4 to 0.7 should get more predictable initial result. Outliers can expect a less predictable initial outcome. Higher correction is more likely with higher values.																																
HVID	Pxs with normal range 10.3 to 12.4 should get more predictable initial result. Outliers can expect a less predictable initial outcome. Lens TD should be 0.4 below HVID. Lenses will generally sit (and form the TZ) on the HVID centre. If the centre of the HVID is away from the visual axis the px has a large angle alpha and the correction may be poorer.																																
Spherical Aberration (SA)	Increase in SA of 0.8 or more has been shown to correlate with reduced axial length in myopia management.																																
Tangential Standard Scale	Tangential plot with a scale range 6.7 to 9.4 can be used to screen for abnormalities that indicate a poor-quality map or corneal irregularity that may impact on outcome or contra-indicate lens wear. Any ectasia is a contra-indication to lens wear. <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;">  <p>Irregularity following soft daily disposable lens removal. No CL wear 48hrs before baseline</p> </div> <div style="text-align: center;">  <p>Any keratoconic or pellucid patterns are not suitable</p> </div> <div style="text-align: center;">  <p>Reduced capture with lash shadows</p> </div> <div style="text-align: center;">  <p>No local irregularities caused by tear film anomalies</p> </div> </div>																																
Axial Power Normalized Scale	<div style="display: flex; align-items: flex-start;"> <div style="flex: 1;">  </div> <div style="flex: 1;"> <table border="1" style="font-size: 8px;"> <tr><td>Flat K</td><td>43.21 D @ 154 °</td></tr> <tr><td>Steep K</td><td>43.94 D @ 64 °</td></tr> <tr><td>ΔK</td><td>0.73 D</td></tr> <tr><td>Flat e</td><td>0.90 @ 154 °</td></tr> <tr><td>Steep e</td><td>0.54 @ 64 °</td></tr> <tr><td>ΔK</td><td>0.7 D</td></tr> <tr><td>ΔK in mm</td><td>0.13 mm</td></tr> <tr><td>IS Index</td><td>-0.20 D</td></tr> <tr><td>SAI</td><td>0.93</td></tr> <tr><td>SRI</td><td>0.48</td></tr> <tr><td>HVID</td><td>11.8 mm</td></tr> <tr><td>Iris: Centre X</td><td>-0.4 mm</td></tr> <tr><td>W (0, 4): Spherical aberration</td><td>0.46</td></tr> <tr><td>CL Displacement</td><td>0.69 mm</td></tr> <tr><td>CL Displacement Angle</td><td>152 °</td></tr> <tr><td>Sag Differential at 8mm</td><td>17 μm</td></tr> </table> </div> <div style="flex: 2; padding-left: 10px;"> <p>Axial shows the refractive properties of the cornea. This cornea with 0.73D astigmatism it is limited to central cornea, peripheral contours (orange & yellow) as spherical. The colour contours show inferior temporal skew (pink circle), this is the 'corneal decentration'. The lens alignment fits in the area of the pink circle and will cause the TZ to form away from the visual axis. Use a ruler or the CL Displacement annotation in Medmont to measure this (shown CL Displacement 0.69mm). TZD up to 0.5mm is bullseye, up to 0.75mm can increase HOAs and rRx, over 0.75 can reduce VA especially with high baseline Rx. Higher Rx are more sensitive to decentration.</p> </div> </div>	Flat K	43.21 D @ 154 °	Steep K	43.94 D @ 64 °	ΔK	0.73 D	Flat e	0.90 @ 154 °	Steep e	0.54 @ 64 °	ΔK	0.7 D	ΔK in mm	0.13 mm	IS Index	-0.20 D	SAI	0.93	SRI	0.48	HVID	11.8 mm	Iris: Centre X	-0.4 mm	W (0, 4): Spherical aberration	0.46	CL Displacement	0.69 mm	CL Displacement Angle	152 °	Sag Differential at 8mm	17 μm
Flat K	43.21 D @ 154 °																																
Steep K	43.94 D @ 64 °																																
ΔK	0.73 D																																
Flat e	0.90 @ 154 °																																
Steep e	0.54 @ 64 °																																
ΔK	0.7 D																																
ΔK in mm	0.13 mm																																
IS Index	-0.20 D																																
SAI	0.93																																
SRI	0.48																																
HVID	11.8 mm																																
Iris: Centre X	-0.4 mm																																
W (0, 4): Spherical aberration	0.46																																
CL Displacement	0.69 mm																																
CL Displacement Angle	152 °																																
Sag Differential at 8mm	17 μm																																
Anticipated TZD	When a lens fits the cornea well it aligns with the cornea between 7 to 10mm. If the TZ forms where the contours indicate it is often not possible to alter the lens fit to move the TZ towards the visual axis. As Rx increased any TZD will impact on VA. See the anticipated outcome score table.																																
Symmetry	Minor asymmetry will influence the TZD. Central / inferior steepening should be shown to be stable before initiating wear as it may indicate keratoconus. It has been shown that 30% of patients can have stable asymmetrical patterns.																																
Axial Length (AL)	Noted at baseline and tracked as part of myopia management.																																
Anticipated Outcome Score	<p>This scoring system gives an indication of the outcome the patient will get based on Rx and corneal metrics. It should help identify multiple factors that can combine to reduce the quality of the VA. It is designed as a guidance only. You should ensure your patient is a suitable candidate with realistic expectations. It is possible to have a very high score but the patient benefits from lens wear if they can tolerate a rRx.</p> <p>Add the scores for each parameter. The anticipated outcome is then indicated. Example: Rx: -3.25/-1.00 x 180 TZD: 0.6 HVID:11.8 pre-presbyope. Scores: BVS 2, Astigmatism 2, TZD 2, HVID 0, monovision 0, Score total 6. Anticipated Outcome: Suitable candidate if rRx acceptable. Target correction on lens removal after 7 nights. Stable correction after 21 nights. Residual refraction may need to be provided in spectacles. Glare will be experienced in certain lighting and dark environments.</p>																																