



The DreamLens™ for  
Vision Shaping Treatment  
Certification Course

*Supplement*



## The DreamLens™ for Vision Shaping Treatment Certification Course

Welcome to the DreamLens Certification Course. This handout is designed to accompany the online or in-person certification process for this exciting product for contact lens corneal reshaping.

This handout supports the presentation you will watch that introduces you to Bausch & Lomb Vision Shaping Treatment™ for the temporary reduction of myopia and will provide you information and certify you on the DreamLens Design.

Please keep in mind that this certification test is not meant to take the place of detailed training on overnight orthokeratology and the DreamLens design.

Additional ongoing training is advised to increase your knowledge in managing patient care in this modality.



In June 2004 Bausch & Lomb acquired a premarket approval for the Boston® Orthokeratology Lens.

This is being marketed in the United States as the Bausch & Lomb Vision Shaping Treatment, or VST, for overnight orthokeratology using Boston® Equalens® II (oprifocan A) lens material.

Additionally, in December of 2004 a supplemental fitting approval that encompasses the use of corneal

topography and/or software based designs was also received from the FDA




It's important to note that Vision Shaping Treatment is not a lens design, but instead is a term to describe methods and designs for overnight orthokeratology. With regards to vision shaping treatment this means that you have choices in high performance overnight orthokeratology lens designs and fitting methods and the use of the high Dk Boston Equalens II material.

Presently there are 4 designs that are being marketed under the Vision Shaping Treatment banner.

A unique feature of the Vision Shaping Treatment is that it offers you the flexibility to choose the fitting method that best suits you and your practice style. We will describe each of these in a moment.

While corneal topography may not be necessary to select the initial lens in some of the vision shaping treatment design offerings, topography is considered essential to properly evaluate the ongoing progress in all designs.



**DreamLens**  
Vision you've always dreamed of...

**High Dk Material**  
Boston® Equalens® II – Dk 85\* (ISO/Fatt)

- Outstanding stability
- Excellent wettability
- Ideal for overnight wear
  - Approved for daily wear, extended wear and overnight ortho-k
- Red and Yellow Buttons
  - Convenient differentiation for patients between Right (Red) and Left (yeLLow) lenses


\*polarographic method (ISO/Fatt)

The Boston Equalens II material has been available for a number of years in North American and has been FDA approved for extended wear since 1991.

It provides a significant amount of oxygen exchange having a Dk of 85 as measured by the ISO/Fatt polarographic method. Importantly, Equalens II provides excellent on-eye wetting resulting in a decrease of debris and surface deposit buildup.

Uniquely, Boston Equalens II materials for overnight orthokeratology are available in distinctive colors to allow patients to easily discern which lens belongs in which eye.

A RED lens is used for the right eye and a YELLOW lens for the left. This allows the wearer to easily determine the proper lens for each eye and also ensures the prescriber is receiving the Boston lens material they expect



**DreamLens**  
Vision you've always dreamed of...

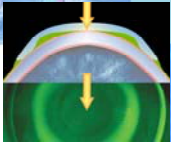
**Principles:**  
**Corneal Shape Change**  
*Compression/redistribution of fluids/cells from the center to periphery*

- Thinner central corneal epithelium
  - Positive pressure from a flat central lens curve
- Thicker mid-peripheral corneal epithelium
  - Negative pressure from tear pool under steep 2<sup>nd</sup> (reverse) curve

In vision shaping treatment the change in corneal shape results from forces exerted on the tear film between the back surface of the lens and the cornea, causing a gradual and steady compression and possibly a redistribution of fluids and epithelial cells under the lens from the center toward the periphery.

Specifically, the central corneal epithelium becomes thinner as a result of positive pressure under a flat central curve of the shaping lens, while the mid periphery becomes thicker due to the negative

created by the annular tear pool under a steeper second or reverse curve.



**DreamLens**  
Vision you've always dreamed of...

**Reverse Geometry Ortho-k Shaping Lens Design**

- Flatter than central corneal radius creating positive pressure
- Creates compression of central corneal epithelium
- Purpose: create "treatment zone" of 5mm or more

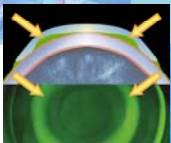
**1st Curve = Back Optic Zone Radius (BOZR)**

The back optic zone radius, also termed BOZR or base curve, is the first curve of Vision Shaping Treatment designs.

Calculated to be flatter than the central corneal radius, this curve provides positive pressure resulting in compression of the central corneal epithelium.

Generally the back optic zone diameter – termed BOZD - ranges from 6.0 to 8.0mm depending on the specific design – creating a treatment zone of 5.0mm or more.

Unlike the base curve in traditional GP designs this BOZR is used only to flatten the cornea and is not considered a fit factor.



**DreamLens**  
Vision you've always dreamed of...

**Reverse Geometry Ortho-k Shaping Lens Design**

- 3–5D (or more) steeper than BOZR
- Creates an annulus tear reservoir inducing negative pressure
- Allows "migration" of epithelial cells and intracellular fluid

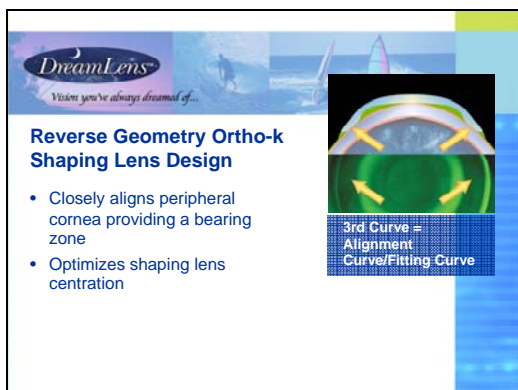
**2nd Curve = Reverse Curve/Fitting Curve**

The second curve is most often termed the reverse zone and typically has a radius of 0.5mm to 1.0mm or is 3 to 5 diopters or more steeper than the back optic zone radius.

It forms an annulus shaped tear reservoir surrounding the central flat zone, inducing negative pressure

The reverse zone provides an area for the epithelial cells and intracellular fluid to collect.

This zone, comprised of one or more curves, is typically 0.6 to 1.0mm wide depending on the design of the shaping lens.



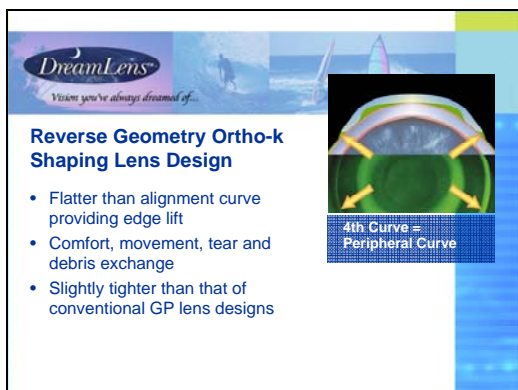
The third zone is the alignment zone.

This area is flatter than the reverse curve area and closely aligns the peripheral cornea providing a bearing zone to help the lens to center.

Its main function is the optimizing of lens centration.

The fitting relationship can be modified by altering the angle or radius of the curve or curves, thus improving the lens centering characteristics.

It is generally 1.0 to 1.5 mm wide depending on the lens design.



The 4th curve or peripheral edge curve is flatter than the alignment curve, but slightly steeper than that of conventional lens designs - providing an edge lift adequate for lens comfort and movement, along with tear and debris exchange.

It is useful to understand the relationship between units such as microns, millimeters and diopters as these are the most commonly used to describe lens design.

Let's start the DreamLens Certification process. Here are the directions for completing your Answer Sheet.

- Be sure to completely fill-out the personal information at the top of the answer sheet. **PLEASE PRINT LEGIBLY**
- Choose the **best** answer from among those offered
- Mark your choice on the answer sheet by completely coloring-in the circle on the answer sheet
- If you decide to change your answer draw an "X" through the answer you do not want to be counted
- You will have approximately 30 seconds to complete each of the questions.

**Question 1: In which direction are the fluids and cells compressed or redistributed when a vision shaping treatment lens is worn?**

**Question 2: What is the value of topography in the course of ortho-k treatment?**

**Question 3: What is the function of the second fitting/reverse curve of the ortho-k shaping lens?**

**Question 4: What is the function of the third or alignment curve of the ortho-k shaping lens?**

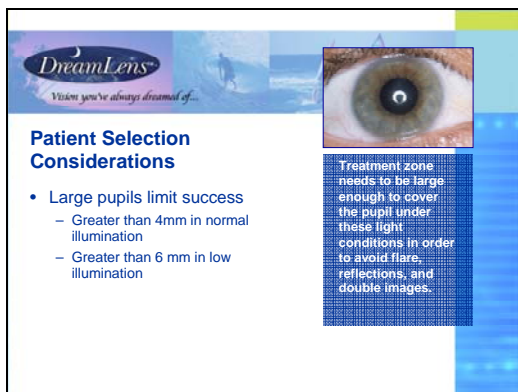


The range of myopic correction reduction approved with Vision Shaping Treatment is -1.00D to -5.00 Diopters.

The most successful ortho-k candidates are moderate to low level myopes whose corneal shapes have "e" values of 0.5 and higher, an apical radius measurement between 40.00 and 46.00 diopters and corneal diameters greater than 11.00mm.

Beware of those patients with higher amounts of myopia, low corneal eccentricity measurements and flat corneas. Against the rule astigmatism greater than three quarters of a diopter can also be problematic, in that this reshaping process may induce even higher amounts of against the rule astigmatism. These types of patients may not be as well-suited for vision shaping treatment.

Also, proceed with caution with previous GP and PMMA lens wearers. These patients should remain out of their lenses until the corneal and refractive measurements have stabilized, often 2 to 4 weeks or more.



**Patient Selection Considerations**

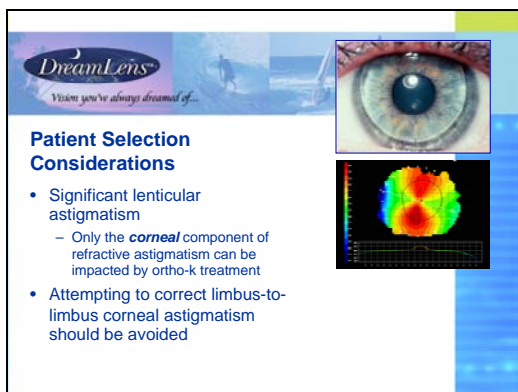
- Large pupils limit success
  - Greater than 4mm in normal illumination
  - Greater than 6 mm in low illumination

Treatment zone needs to be large enough to cover the pupil under these light conditions in order to avoid flare, reflections, and double images.

Evaluate the pupil size accurately in both normal and dim illumination.

Depending on the amount of attempted myopic reduction, the expected treatment area in overnight orthokeratology is usually 5 to 6mm in size.

Therefore, patients with pupils greater than 5mm in normal illumination and/or greater than 6mm in low illumination may not be suitable candidates. Large pupils may result in haloes, glare, or peripheral distortion in dim lighting conditions.



**Patient Selection Considerations**

- Significant lenticular astigmatism
  - Only the **corneal** component of refractive astigmatism can be impacted by ortho-k treatment
- Attempting to correct limbus-to-limbus corneal astigmatism should be avoided

The effectiveness of ortho-k treatment is reduced where there is significant internal or lenticular astigmatism.

Note any potential residual astigmatism by comparing the cylinder component of the spectacle Rx to the amount of corneal astigmatism measured by central keratometry. Since vision shaping treatment affects corneal astigmatism only, avoid cases where residual astigmatism may be greater than 0.75D.

Also, limbus-to-limbus corneal astigmatism may result in a less effective ortho-k procedure. In these cases the fitting relationship is altered in the periphery and lens rocking may occur. Visually, the net result is that full myopic reduction is not achieved or the treatment regresses quickly.



**Patient Selection: Contraindications**

- Active corneal infections of cornea, acute/subacute inflammation of anterior chamber
- Disease, injury, abnormality affecting cornea, conjunctiva, eyelids
- Severe dry eyes
- Corneal hypoesthesia
- Any condition exacerbated by contact lens wear
- Allergy to any ingredients in care solutions

It is advisable to avoid those patients that have any active ocular infections.

Patients with severe corneal irregularity from injury, surgery or a condition such as keratoconus or a corneal dystrophy should also be avoided.

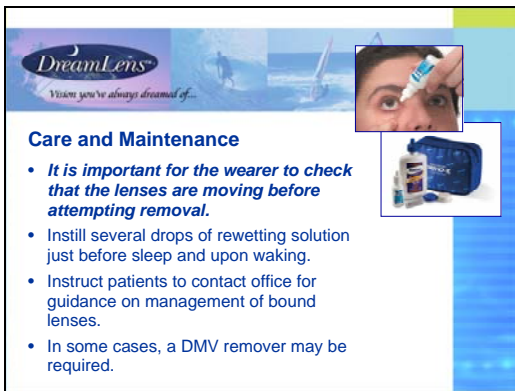
Also note patients who have demonstrated an allergic response to lens care products that would be used in vision shaping treatment.

**Question 5: What is the generally accepted maximum “against-the-rule” astigmatism that can be attempted with ortho-k fitting?**

**Question 6: What is the maximum amount of myopic reduction that Vision Shaping Treatment is approved for by the FDA?**

**Question 7: Why may patients with large pupils experience problems with ortho-k?**

**Question 8: Why is lenticular astigmatism a potential problem when fitting ortho-k shaping lenses?**



**Care and Maintenance**

- It is important for the wearer to check that the lenses are moving before attempting removal.
- Instill several drops of rewetting solution just before sleep and upon waking.
- Instruct patients to contact office for guidance on management of bound lenses.
- In some cases, a DMV remover may be required.

Patient compliance is an important factor in the success of Vision Shaping Treatment patients. Here are a few important tips.

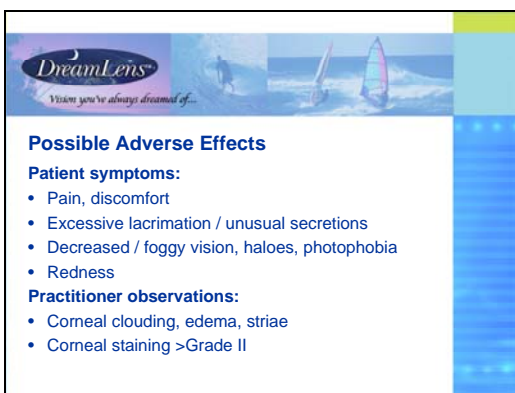
There is no need to remove the shaping lenses if awoken during the night - but upon awakening in the morning it is advisable that patients instill a few drops of the recommended rewetting solution and wait a few minutes before attempting to remove their lenses.

Of greatest importance is that the patient should check that the shaping lens is moving prior to lens removal.

While removal of Vision Shaping Treatment lenses is usually not a problem for the patient in some cases, due to the larger lens diameter, it may be necessary to employ the use of a DMV lens remover.

Be sure to advise your patients to contact your office if they have difficulty removing the lenses.

Also, remind the patient to use only the recommended approved GP lens care products with their Vision Shaping Treatment lenses.



**Possible Adverse Effects**

**Patient symptoms:**

- Pain, discomfort
- Excessive lacrimation / unusual secretions
- Decreased / foggy vision, haloes, photophobia
- Redness

**Practitioner observations:**

- Corneal clouding, edema, striae
- Corneal staining >Grade II

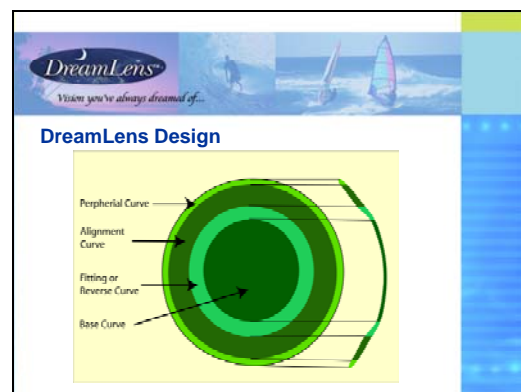
Patients should be advised to discontinue reshaping lens wear and call your office immediately if they experience pain, discomfort, excessive tearing or any of the other symptoms described on this slide.

Vision shaping treatment should also be discontinued if you observe any corneal hypoxia or staining greater than Grade 2.

**Question 9: Which patient symptoms with vision shaping treatment are of most concern to the contact lens practitioner?**

**Question 10: What is the most important observation that the wearer should make prior to attempting removal of their ortho-k shaping lenses after waking?**

Now that we have discussed some general principles regarding Vision Shaping Treatment let's look at the details of how the DreamLens works.



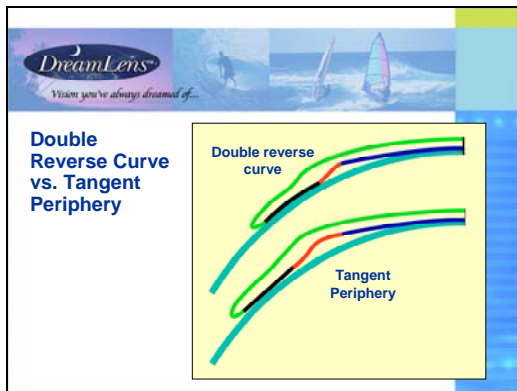
The patented DreamLens is a prototype of many of the 4 zone double reverse curve lenses.

The easiest way to describe the DreamLens is as a dual compression lens with the base curve and alignment curve providing the two compression zones. The base curve will determine how much myopia is reduced and the alignment curve will control centration.

Also, the base curve provides a compression factor of an additional 0.75D. This over correction is pre-calculated for the small amount of regression that takes place upon removal of the DreamLens in the morning.

The fitting or reverse curve simply connects the two curves and provides a relief area for tissue redistribution.

The peripheral curve's primary purpose is to help in tear exchange.

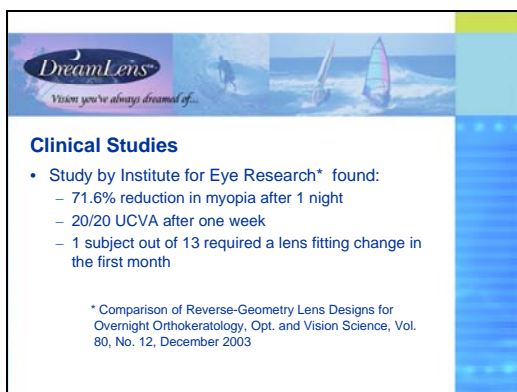


There are two general types of Ortho-K or shaping lenses on the market today, the double reverse curve and the tangent periphery lenses.

Both lenses have four distinct functional zones - a base curve zone, a zone to bring the back surface of the lens back to the corneal surface, a secondary compression zone and a peripheral zone.

The major difference in these two designs is the Alignment or secondary compression zone. The 4 zone double reverse curve – the upper drawing on this slide - has a more aligned fit resulting in increased surface area touch which will enhance centration. Conversely, the tangent periphery style lenses shown graphically in the lower drawing on this slide only touch at one point since it is a tangent or line being fit to a curve. This will decrease the amount of surface area in contact with the cornea.

The double reverse design has more design flexibility due to the curved nature of the alignment curve. This is the concept the DreamLens is based upon.

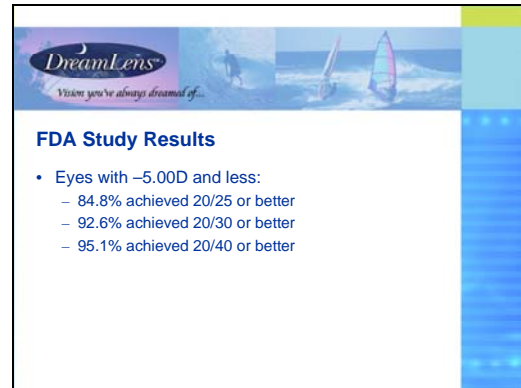


Overnight orthokeratology results in very rapid changes to the cornea.

A study done in Australia demonstrated that after one night most of the expected corneal change is complete.

In the study approximately 72% of the subject's myopia was decreased after the first night of wear and after one week the process is mostly complete with a marked reduction in myopia.

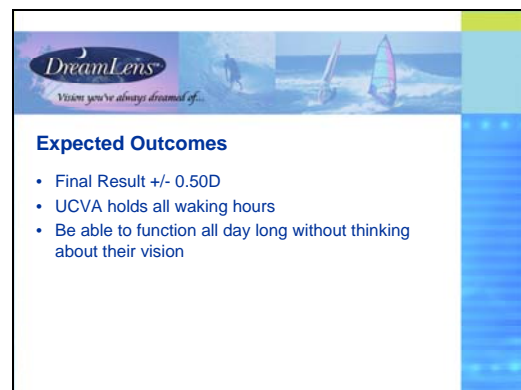
In this study over 90% of patients did not require a lens change in the first month.



The FDA study for vision shaping treatment with overnight orthokeratology also showed high rates of success.

These test results are for each eye separately.

For subjects with less than 5 diopters of myopia, approximately 85% achieved visual acuity of 20/25 or better, while over 95% achieved 20/40 or better after removal of their overnight orthokeratology lenses.

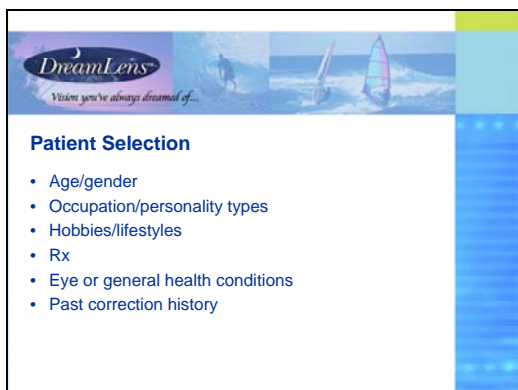


Studies such as these have been the basis for some expected patient outcomes after overnight orthokeratology.

First, it is expected that final visual results should be within plus or minus one half diopters of the expected reduction in myopia.

Second, the uncorrected visual acuity should be stable throughout the patient's daytime hours.

And finally, the patient should be able to function without thinking about their vision during those daytime hours.



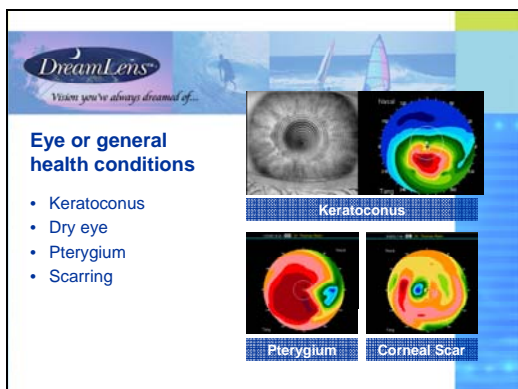
**Patient Selection**

- Age/gender
- Occupation/personality types
- Hobbies/lifestyles
- Rx
- Eye or general health conditions
- Past correction history

Patient selection is a critically important factor for success with the DreamLens for vision shaping treatment.

Along with the spectacle prescription and ocular measurements consider the prospective patient's age, gender, occupation, hobbies and lifestyle. These are all factors to take into consideration for consistently successful patients.

Let's review some of the ocular conditions that are important to identify prior to fitting the DreamLens.



**Eye or general health conditions**

- Keratoconus
- Dry eye
- Pterygium
- Scarring

**Keratoconus**

**Pterygium**

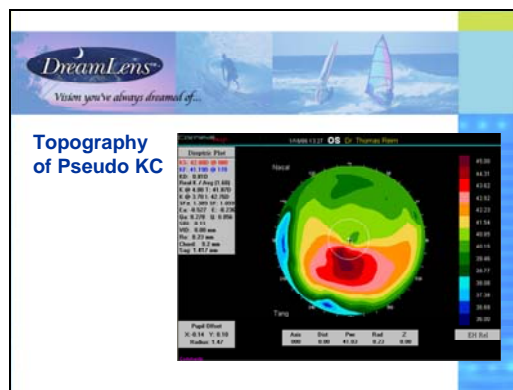
**Corneal Scar**

Ocular conditions such as Keratoconus need to be avoided. Notice the abnormal corneal topography on the left with large amounts of distortion.

Mild or even moderate dry eye is usually no problem. Advising these patients to use lubricating drops prior to and post removal is advisable.

Pterygium is another condition that has the potential to be aggravated by vision shaping lenses. Vision shaping treatment designs such as the DreamLens could compress the cornea in the mid-periphery causing the pterygium to advance.

Corneal scarring can cause atypical shaping results in the area of the scar. If the scar is in the visual axis unwanted distortion could develop.



**Topography of Pseudo KC**

14/09/11 07:05 Dr. Thomas Ryan

Normal

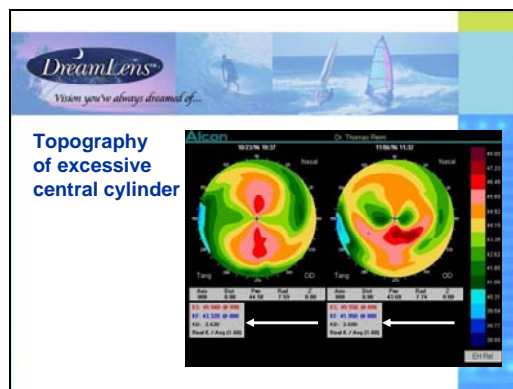
Topog

Peak (mm) X: 0.14 Y: 0.10 (Radius: 7.47)

| Axis | Dist  | Flatt | Steep | Q    |
|------|-------|-------|-------|------|
| 180  | 45.94 | 43.32 | 2.62  | 0.00 |
| 90   | 43.32 | 45.94 | 2.62  | 0.00 |
| 45   | 44.63 | 44.63 | 0.00  | 0.00 |
| 135  | 44.63 | 44.63 | 0.00  | 0.00 |

There are some patients who demonstrate a corneal topography that mimics that of keratoconus. This can occur due to a high riding GP lens, but is usually a temporary situation. If the GP lens is removed for a period of time, the cornea will return to its normal shape.

Rule out the possible keratoconic versus pseudo keratoconic eye prior to proceeding with a DreamLens fitting.



**Topography of excessive central cylinder**

11/06/11 11:12 Dr. Thomas Ryan

Normal

Topog

Peak (mm) X: 0.14 Y: 0.10 (Radius: 7.47)

| Axis | Dist  | Flatt | Steep | Q    |
|------|-------|-------|-------|------|
| 180  | 45.94 | 43.32 | 2.62  | 0.00 |
| 90   | 43.32 | 45.94 | 2.62  | 0.00 |
| 45   | 44.63 | 44.63 | 0.00  | 0.00 |
| 135  | 44.63 | 44.63 | 0.00  | 0.00 |

Another patient selection factor to avoid in vision shaping treatment is a large amount of corneal astigmatism.

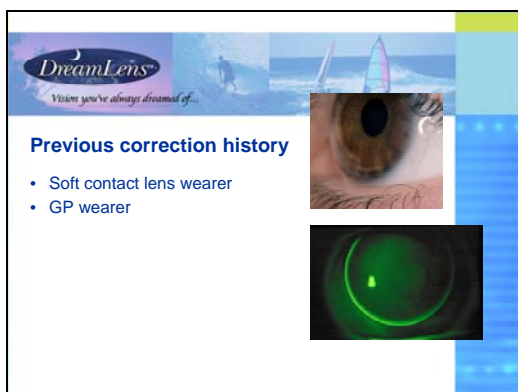
Here is an example. Note a starting steep K of 45.94 and flat K of 43.32 resulting in 2.62 diopters of astigmatism. After treatment, the flat meridian flattened 1.37 diopters to 41.95 and the steep meridian flattened 0.39 diopters to 45.55. This leaves residual astigmatism of 3.60 diopters which is an increase of almost 1 diopter, which is obviously not a good result.

So, what happened? The lenses did what they were designed to do, flattening the cornea at the point of touch. The 180 degree meridian flattened, with the

redistributed corneal tissue starting to fill in the steeper areas of the cornea.

Notice the 90 degree meridian no longer has the well-defined dumbbell pattern and the curvature in this meridian had decreased. Unfortunately, the flat meridian flattened more than the steep meridian resulting in an increase in the amount of cylinder.

If the area of steepness was smaller and the amount of flattening greater causing more tissue to be displaced, then the cylinder would have been reduced. Choose patients who have less than 1.50D of with the rule astigmatism and where their amount of cylinder is limited to one half of the sphere power to allow the displaced tissue to fill in the steep areas.



Previous contact lens wear is not an absolute contraindication for the fitting of the DreamLens for vision shaping treatment. In fact, soft contact lens wearers are wonderful candidates for overnight orthokeratology.

Soft lens wearers can be fit immediately as long as the soft lenses are well fit and causing no obvious signs of corneal irritation or edema.

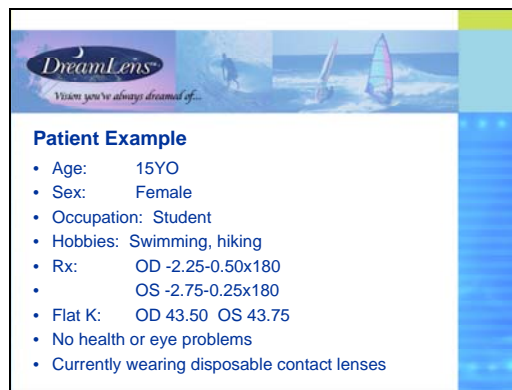
Previous soft lens wearers benefit from vision shaping treatment by not having to worry about losing a lens during the day or having their lenses dry out during wear.

Conversely, previous or current rigid contact lens wearers often produce atypical results. Fitting these patients may result in a lower success rate than non-wearers of GP's.

*Continuing on with the DreamLens Certification process the next question is:*

**Question 11: Which of these patients is the best candidate for the DreamLens?**

**Question 12: The DreamLens is designed to reduce the myopic spherical power with an added regression factor of how much?**



Now, let's review a case where the patient would be considered an excellent candidate for the DreamLens. In our example the patient is 15 years old, myopic, and a soft lens wearer. She is active in sports, in fact is a swimmer where contact lens wear is usually contraindicated and she has no present systemic health issues.

Her spectacle prescription demonstrates a moderate amount of myopia with little corneal and refractive cylinder.

Her initial case history indicates that she should be an excellent candidate for vision shaping treatment, one where a high success rate is expected.

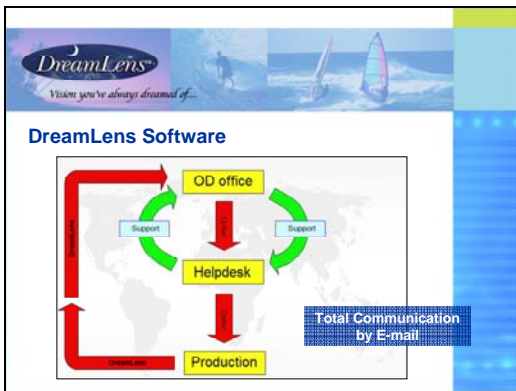
Let's discuss how to design a DreamLens for this patient.



The DreamLens design process is quite simple to understand and even easier to use.

The system is based on the accumulation of topographical patient data, importing it to proprietary software from which the customized patient lens is designed and ordered.

The DreamLens System is based upon data gathered from thousands of overnight orthokeratology patients.

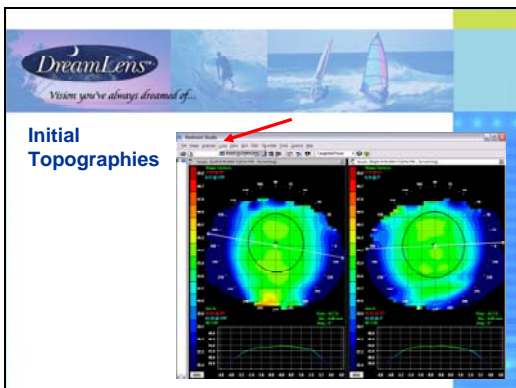


We have attempted to simplify the ordering process by setting up an electronic email communication mechanism.

Here is a flow diagram of how to place an order using the proprietary DreamLens Software.

For a normal order the data is sent to the help desk at your DreamLens distributor lab. The help desk will review the record to make sure there are no questions on the order. The lens will be fabricated to the customized parameters and quickly shipped to your office.

Any question that may arise regarding a patient can be electronically communicated to this help desk where it will be quickly reviewed and then will e-mail a response. Once all questions are resolved, the lens is ordered.



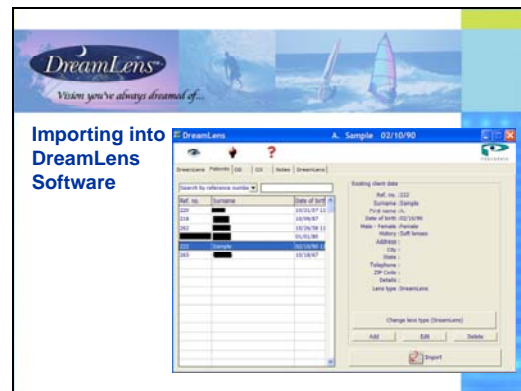
Now back to our patient example.

Once the examination is completed and it's determined that she is a good candidate, explain the procedure and assess the patient's motivation.

Next, corneal topography measurements are taken, in this case with the Medmont topographer.

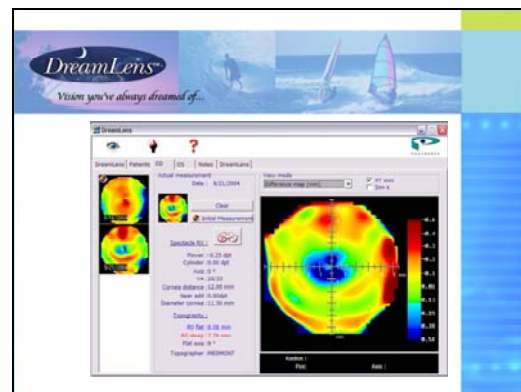
In the DreamLens software program click on the Links button, click again on the DreamLens design

and the data will be extracted from the topographer and transferred into program for lens calculation.



The next step is to choose the proper patient. Click on the patients tab, this above screen will appear, then simply click on the patient name.

Confirm existing client data, and then click on the "import" button to begin the data transfer process.



The patient's topographies will be imported.

Select the proper eye and a strip of the respective color map images will appear on the left side bar.

Next, highlight the button with the eyeglasses icon and a drop down menu will appear.

Enter the date and time the topography was taken, the spectacle prescription, amount of cylinder, axis, acuity with this prescription and finally, the corneal diameter. It is not necessary to input the patient's axial power. Also, the vertex distance is predetermined in your default values.

The corneal diameter is a key measurement here in that it will determine whether the overall diameter of the DreamLens is either 10.1, 10.5, or 10.9 millimeters.

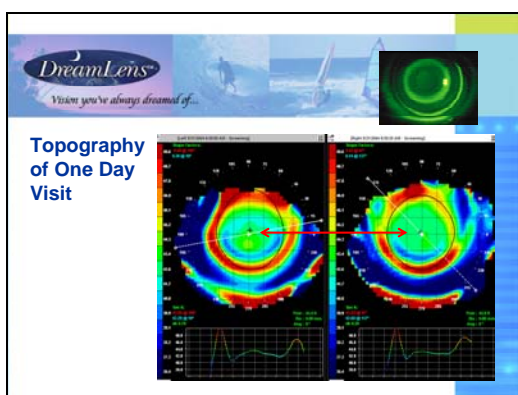


problem is noted on two consecutive visits before changing the lens design.

Answer any patient questions and schedule the next appointment in one week at the end of the day. While the one-day visit is in the morning, on future progress checks it is best to evaluate the patient later in the day to test how the vision treatment is holding throughout the day.

**Question 13: Which of these are not required for software calculation of a DreamLens?**

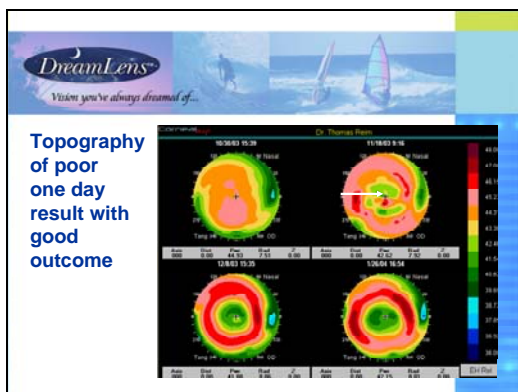
**Question 14: DreamLens binding in the morning is reduced by the patient doing what?**



For our example patient above is the one-day topography.

Notice the lens was well centered with the treatment zone occurring primarily over the patient's pupil.

This patient can be advised to continue with overnight wear of the DreamLens until the next scheduled visit.



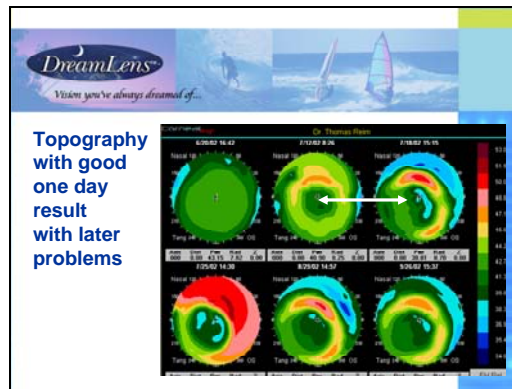
Let's review some other examples of topographical maps.

The upper left graphic is the baseline measurement, prior to fitting of the DreamLens.

The one-day post fit topography has a substandard image with either a central island or central distortion, but the lens position appeared to be good in that the treatment area is central.

In this case no change was made since subsequent topographies were well centered with no problems.

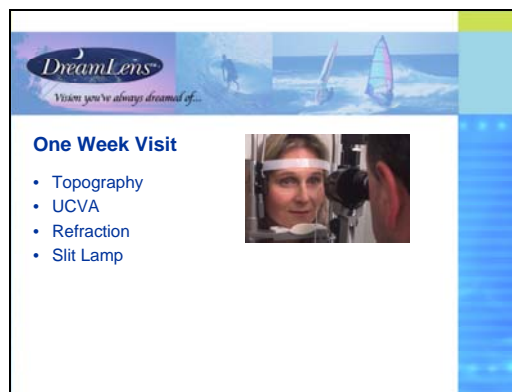
From our experience do not rush to change the lenses, as often a sub optimal result will improve with time.



Here's another case with different results – in fact just the opposite of the previous example.

In this situation the one-day visit demonstrated excellent results but on later visits the lens decentered inferior nasally. Notice the position of the treatment zone. It would not be unexpected for this patient to describe symptoms of haloes and glare around lights, especially in dim light situations.

Since these topographies are consistent over a number of subsequent visits a change might be in order, in particular if associated with other findings.



Let's return to a discussion of how to evaluate DreamLens results over time.

After the initial morning visit the patient should return in approximately one week.

During this visit, check the topography and uncorrected acuity, perform a refraction and then evaluate the eye with the slit lamp.

At this point the uncorrected vision should be in the 20/20 to 20/25 range and holding during all waking hours. The treatment will be complete in most cases at this point. During upcoming office visits you will be looking for consistency in visual and topographical findings.

Make sure the patient brings their lenses with them. While an on-eye lens evaluation is not usually necessary it will save time on those rare occasions when it is indicated.

**One, Three, and Six Month Visits**

- Same as one week visit
- If a problem develops, reschedule for a one week repeat visit to see if problem is duplicated
- Make change only after problem shows up on two consecutive visits

Repeat the evaluations performed at the one-week visit during the one, three and six month progress checks.

If a problem is present, schedule another visit in a week to see if the problem is still present.

Unless the patient's presents with acute discomfort or pain only make a change if the same problem is present during two consecutive visits.

**Topography of isolated problem/ no change**

Let's discuss some of the problem solving techniques for the DreamLens.

In this example the patient has a history of doing well with his vision shaping treatment lenses then a problem is present during an office visit.

Notice how the lens appears to be decentered on the map in the lower left hand corner.

Subsequent visits are again fine.

Often problems are one-time occurrences that prompt the visit.

Reschedule the patient again a week later to verify the problem before considering a lens changes. Don't be too quick to make changes.

**Lost lens before visit**

Now, let's discuss a situation where the patient loses a lens prior to a scheduled visit.

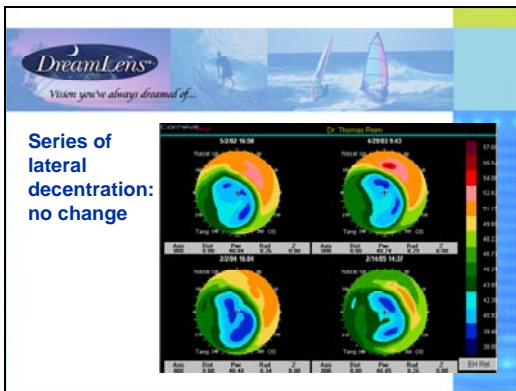
Here's a topography example of a patient who was overdue for her annual exam. She lost a lens and scheduled her exam, failing to mention that she had lost a lens.

It's always important to ask patients about how often and how long they are wearing their lenses.

The middle topography demonstrates the loss of treatment effect with a steepening of the flat K by approximately two diopters.

During a progress exam if a patient has a refraction of  $-1.50$ , ask "Does the lens still work fine and just needs to be replaced" or "is the lens not working as before and a change needs to be made."

In this case no change was made and the previous parameters worked successfully.



One more note about corneal topography.

Here is a series of patient topographies over a 3 year period.

Although the lens is laterally decentered, the patient has had no problems over the 3 years and the topography has been stable and consistent.

In our experience, topographies do not have to be perfect to have a successful result.

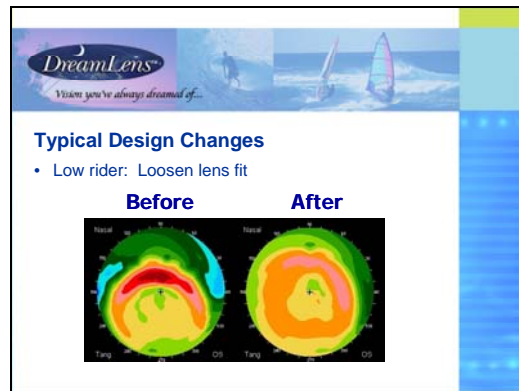
**Question 15: It is recommended to make design changes to a DreamLens after what?**



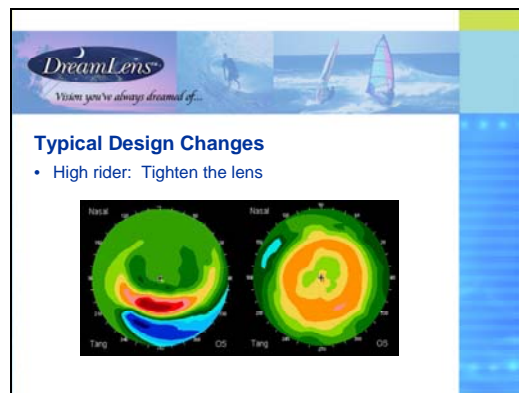
Making a change with the DreamLens is as simple as ordering one.

The topography, refraction information and uncorrected acuity are all sent to the lab along with any comments on what the problem is.

The help desk will recommend the best change to solve the problem.



The most common change is to loosen the lens when it is positioning inferiorly. This will give the upper lid more grab to raise the lens.



A high rider is just the opposite. In this case the lens needs to be tightened.



Lateral riders need more surface area in the alignment curve so this area is widened – primarily by increasing the overall diameter.

If there is an inadequate amount of myopic reduction flattening the base curve would be appropriate. This will cause a corresponding change in the fitting curve to compensate for the change in sagittal depth of the lens.

Also, too small of a treatment zone can be helped by increasing the optical zone.

**Question 16: Which of the following are not used in the DreamLens Fitting Process?**

**Question 17: In case of inferior centration with DreamLens, the lens has typically been fitting how?**

**Question 18: What is usually the cause of a high-riding DreamLens?**

**Question 19: A laterally decentered treatment area with DreamLens wear can usually be remedied by what action?**

**Question 20: Fluorescein patterns are not used to design the DreamLens because of what reason?**



**DreamLens**  
Vision you've always dreamed of.

**Summary of Major Points**

- No initial startup costs – software is free
- No trial lens fitting sets
- Reduced chair time
- Patient selection is critical to success
- DreamLens program guides you through design and ordering process

To summarize the DreamLens System:

There are no initial startup costs. There are no fitting sets to buy and the software is free. No trial fitting results in reduced chair time and increased efficiency.

Patient selection is the most important factor for success and following the guidelines will give you a high success rate.

The DreamLens design is the result of thousands of successful patients. Our software program guides you thru the design, ordering and troubleshooting process to make the DreamLens an accurate and advanced vision shaping lens system.

***Thank you for choosing the DreamLens.***