# Multifocal Contact Lens Patient Selection, Fitting and Problem-Solving

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COPE Course ID: 63329-CL
Qualified Credit: 2 hour(s)

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## Presbyopic Market

- 74 million Baby Boomers born between 1946-1964*
- 66 million Generation Xers born between 1965-1980*
- In 2010, about 1/3 of US population was between 40-59 years of age.
- In 2015 US census data reports 40% of the population is over 45
- In the next decade, 28% of all contact lens wearers will be >50 y.o.
- 90% of all CL wearers between 35-55 have worn CL's majority of their life

*Pew Research Center

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## Presbyopic Market

- Steady growth of multifocals
- Surpassed monovision
- Presbyopes are in their peak earning period
- Knowledge of multifocal contact lenses is limited
- More tech savvy, desire high technology
- Want information
- Fit early

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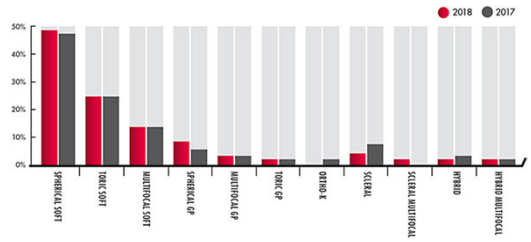
## Growth of Multifocals

from Contact Lens Spectrum 1/2019

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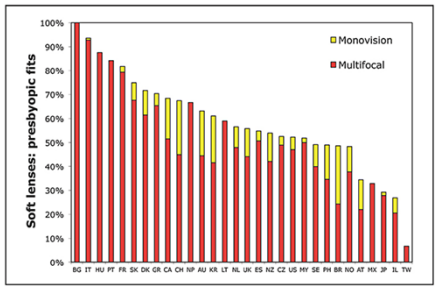
## Contact Lens Spectrum 1/2016

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## Contact Lens Alternatives for Presbyopia

- Single Vision/Reading Spectacles
- Monovision
- Bifocals/ Multifocals

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## Monovision Issues

- Depth Perception
- Possible Suppression
- Contrast Sensitivity/Vision Loss
- Night Driving
- Liability

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## Driving/Critical Vision Tasks

- Monovision wearers have difficulty suppressing headlights with night driving with one-third experiencing glare
- It is advised for monovision patients to avoid driving or operating dangerous machinery during adaptation
- Over-correction spectacles strongly recommended

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## MONOVISION VERSUS CL BI/MULTIFOCALS

- Johnson J, et al; Multivision Vs. Monovision: A comparative study: presented at CLAO, Feb, 2000
- 6 weeks GP multifocal; 6 weeks monovision (or vice versa)
- 75% who completed study preferred multifocal

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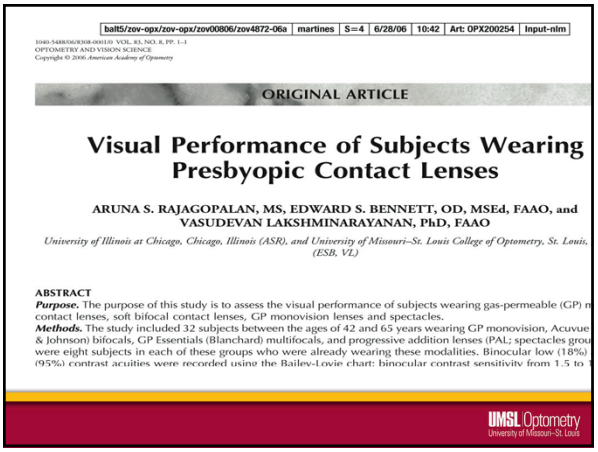


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## Monovision Versus CL Bi/Multifocals

- Rajagopalan A, et al: CONCLUSIONS
- GP wearers exhibited highest contrast sensitivity at all frequencies, high and low contrast acuity and least disability glare; soft bifocals were second; monovision last in all categories

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## CL MULTIFOCALS DO NOT WORK . . . UNTIL YOU FIT THEM!

- Jones et al J Br Contact Lens Assoc, 1996
- 160 non CL wearers placed into reactive and proactive groups (in the latter CLs were actively discussed as a corrective option)
- Only 9/80 in reactive group were fit into CLs
- 46/80 in proactive group - including 21/33 presbyopes - were fit into CLs

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## 2016 Annual Report (Nichols J, CLS 1/17)

- Survey via Jeff Johnson OD (Vice-President, Robert W. Baird & Co.)
- For presbyopes wearing CLs, practitioner preference was:
  - Multifocal lenses: 75% (59% in 2008)
  - Monovision: 17% (27% in 2008)
  - Over-spectacles: 8% (14% in 2008)



## Patient Selection and Communication



## Patient Selection


- **Positive Outlook for MF's in general (gen xers!!)**

**Patients that currently wear GP/soft lenses without significant dryness or other comfort issues**

**Unsatisfactory vision with monovision**

**New CL wearers that are motivated to remain free from glasses and desire good vision at all distances**

**If interested, mention all options to them.**

Bennett E. Contact lens correction of presbyopia. *Clin Exp Optom 2008; 91: 3: 265–278.*



## Be Enthusiastic!

- Avoid negative comments
- Instill confidence
- Believe in them, so your patient will believe in them



## Explore the Patient's Visual Environment

- Hobbies
- Occupation
- Everyday tasks
- What do they want the lenses for?
- What are the primary tasks?
- What are the near, intermediate and distance tasks?



## Patient Communication

- Address visual needs prior to selecting lens design
  - Which visual demand motivated your patient to seek MFCLs?
    - Computer, cell phone, watch, deskwork, etc
    - Often times, just achieving that 'need' creates a happy experience!
- Setting expectations
  - "I want you to be able to do most things, most of the time."
  - Underpromise & Overdeliver

## Patient Communication

- Setting expectations:
  - Use words like: balancing the vision demand in the contact lenses, functional vision, freedom from glasses
  - Avoid using: blurry, compromise, less than perfect, less crisp, glasses will always be better

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## Educate

- Longer fitting process possible-multiple visits
- Some adaptation required
- Share success stories
- Educate about the design
- Make them a partner in the process
- Try "real world" environment- not 20/20
- Cover fees

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## Adaptation/Len Changes

- Vision will improve over time
- Lens changes are the rule (1/eye initially, then 1/patient)
- 6 - 8 weeks to adapt
- No Monday morning surprises
- BOTTOM LINE: "If you are patient and motivated, there is an 80% success rate with these lenses."

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## Prefit Evaluation

- Evaluate the tears, cornea and lid
- Evaluate the anterior and posterior health
- Current refraction and add
- K values
- Dominant Eye
- Pupil Size
- HVID
- Lower Lid position

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## Determining the Dominant Eye

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## Soft Multifocal Lenses

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## Silicone Hydrogel Soft Multifocals

- Air Optix Multifocal, Dailies Total 1 (Alcon)
- PureVision Multifocal, PureVision 2 for Presbyopia, Ultra for Presbyopia, Ultra MF for Astigmatism (Bausch + Lomb)
- Biofinity Multifocal, Clariti 1 day MF, (CooperVision)
- Acuvue Oasys for Presbyopia (J&J)

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## Silicone Hydrogel Multifocals Definitive material (Contamac)

- NaturaSOFT MF (Advanced Vision Tech)
- Intelliwave MF & Toric (Art Optical)
- Metrofocal Definitive and Toric (Metro Optics)
- C-Vue Advanced Hydravue MF (Unilens)

❖Specialty powers, more parameters

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## Daily Disposable Multifocals

| | Dailies AC+ | Dailies Total 1 | 1 day AV Moist | Biotrue for Presb. | Proclear 1 day MF | Clariti 1 day MF | Naturalvue MF 1 day |
|---|---|---|---|---|---|---|---|
| Manuf. | Alcon | Alcon | J&J | B+L | Cooper Vision | Cooper Vision | Visioneering Tech. |
| Lens Design | Center near | Center near | Center near | Center near | Center near | Center near | Center distance |
| Material | Hydrogel | SiHy | Hydrogel | Hydrogel | Hydrogel | SiHy | Hydrogel |
| Monthly counter-part | Air Optix MF | Air Optix MF | | PV 2 for presbyopia & Ultra for presbyopia | | | |
| Add | Lo, Med, Hi | Lo, Med, Hi | Low, Mid, High | Low, High | One add up to +2.50 | Low, High | One add up to +3 |

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## Fitting Tips

- Understand the designs
- Know the materials and replacement schedules
- **Follow the fitting guides**
- Don't jump from design to design

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## Fitting Tips

- Low Rx or emmetropes less successful
- ≤ 0.75D astigmatism or use toric multifocal
- Start with best corrected sphere, vertexed back
- Current refraction and add
- Dominant eye
- Consider D/C monovision before fit

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## Fitting Tips

- Use normal room illumination
- Use least minus/most plus Rx
- Let lenses settle 10-20 minutes
- Hand-held trial over-refraction
- Change power in small 0.25 steps
- Use the lowest add possible – Round down

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## Fitting Tips

- Assess vision binocularly
- Over-refract monocularly with both eyes open
- Use everyday reading material
- Dispense trials
- Follow-up in 2 weeks-Allow the patient to adapt
- It is okay to have less than 20/20 VA

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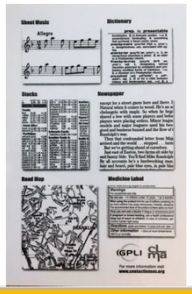
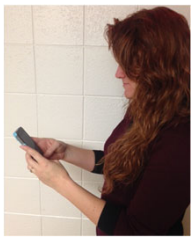
## Checking Near Vision

Use good illumination with real world materials





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## Center Near Designs

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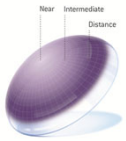
## Air Optix Multifocal

- Alcon
- Monthly replacement SiHy
- Daily or Extended wear up to 6 nights
- 3 add powers (Lo, Med, Hi)
- Center near
- Dk/t=138
- BCR 8.6, Powers +6 to -10

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## Dailies Aquacomfort Plus Multifocal & Dailies Total 1 Multifocal



- Available in a 30 or 90 pack
- AC+ BCR 8.7/ Total 1 8.5
- Powers +6.00 to -10.00
- Material- Nelfilcon A (same as Dailies AC+) or Delefilcon A for Dailies Total 1

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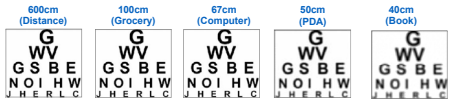
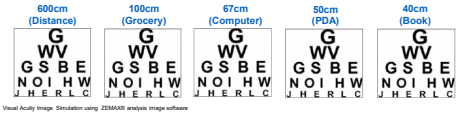
Courtesy of Alcon

### Innovation by Design

**Case 1A: Early Presbyope with Slightly Reduced Amplitude of Accomodation**




**Case 1B: Early Presbyope with Slightly Reduced AA + LO ADD lens**

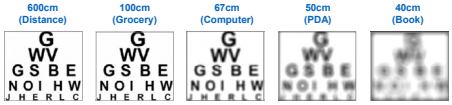



Visual Acuity Image Simulation using ZEMAX® analysis image software

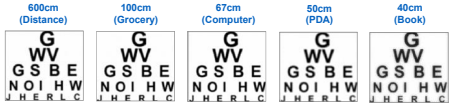
Courtesy of Alcon

## Innovation by Design

**Case 2A: Established Presbyope with Reduced Amplitude of Accomodation**



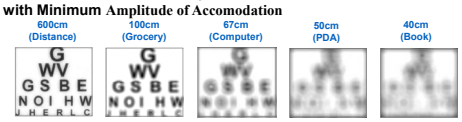

**Case 2B: Established Presbyope with Reduced AA + MED ADD lens**



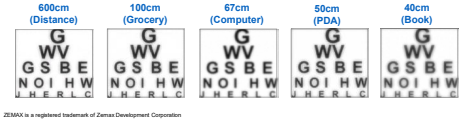

Courtesy of Alcon

## Innovation by Design

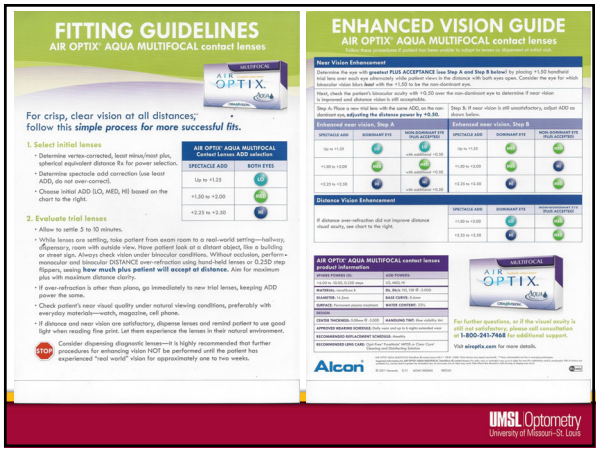
**Case 3A: Established Presbyope with Minimum Amplitude of Accomodation**

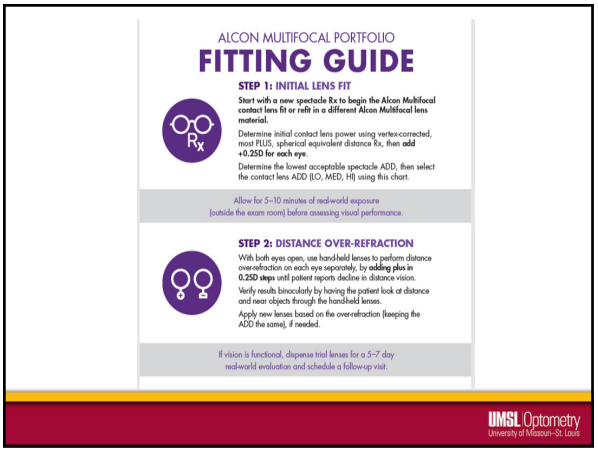



**Case 3B: Established Presbyope with Minimum AA + HI ADD lens**

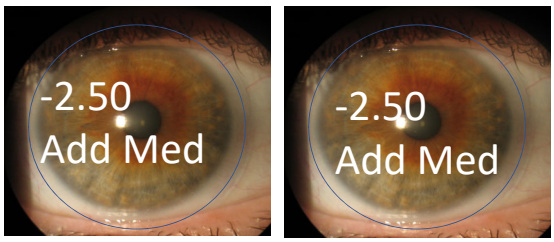



ZEMAX is a registered trademark of Zemax Development Corporation

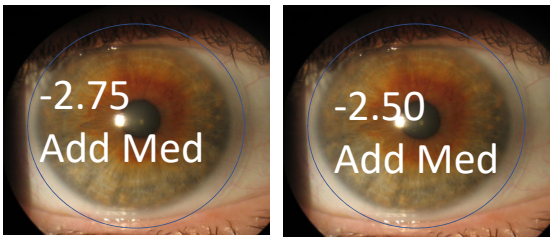


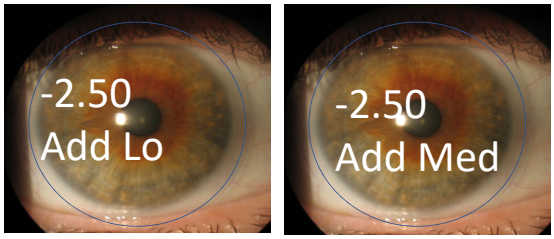

Air Optix Multifocal
Rx -2.75 Add +2.00 OD Dominant Eye
Initial Trial lens selection



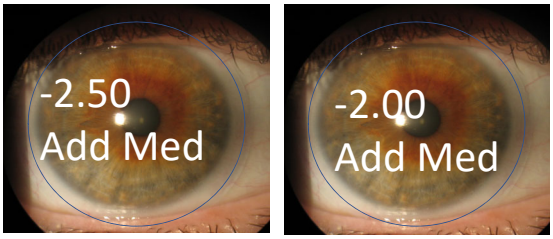

Air Optix Multifocal
Poor distance vision
Step 1



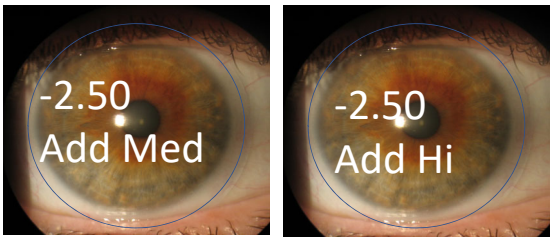
Air Optix Multifocal
Poor distance vision
Step 2




Air Optix Multifocal
Poor Near Vision
Step 1




Air Optix Multifocal
Poor Near Vision
Step 2




## Dailies Total 1 MF Case

Case-49yo currently wearing Air Optix MF
OD -0.75 Low Add and OS -2.50 Low add

- Refraction OD -0.75-0.75 X100 Add +1.50
  OS -2.50 DS Add +1.50
  Dominant eye OS
- Occasional lens wear

- Refit Dailies Total 1 MF
  OD -0.75 Low/ OS -2.50 Low
- VA Distance 20/20+, Near 20/25 OU

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## PureVision 2 for Presbyopia

- Bausch + Lomb
- Monthly replacement/SiHy
- Daily wear to Continuous wear up to 30 days
- Low and high adds
- Center near
- 3 zone progressive design
- Overall thickness profile is thinner compared to PV MF
- Power +6 to -10

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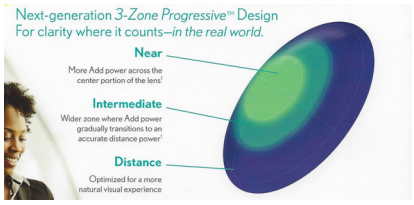
## PureVision 2 for Presbyopia




From Bausch + Lomb

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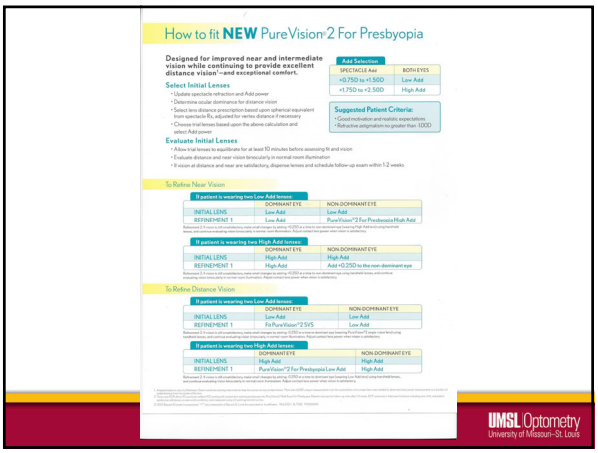
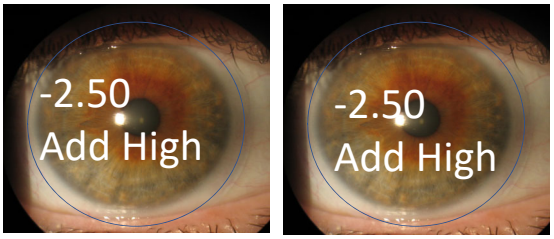



PureVision 2 for Presbyopia
Rx -2.50 Add +2.00 OD Dominant Eye
Initial Trial lens selection




## Ultra for Presbyopia and Ultra for Astigmatism Multifocal

- Bausch + Lomb
- BCR 8.5, Power +6 to -10, Toric +4 to -6, 3 cyl. powers & around the clock correction
- Samfilcom A
- Monthly, daily wear
- 2 add powers Low and High
- Same design as PV 2 for Presbyopia
- Dk/t 163, 46% water content
- Moisture seal technology

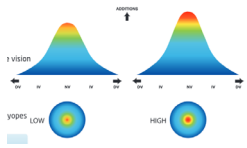



## Biotrue for Presbyopia


- Bausch + Lomb
- BCR 8.6, Power +6 to -9
- Nesofilcon A, Same as Biotrue ONEday
- 30 & 90 pack
- Low & high adds
- Same design as PV2 for Presbyopia



## Clariti 1 Day Multifocal




- CooperVision
- **Silicone Hydrogel**- Somofilcon A
- BCR 8.6, Power +5 to -6
- Two adds
- 30 & 90 pack
- Dk/t=86

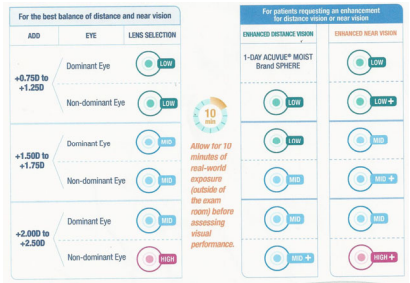


## 1 day Acuvue Moist Multifocal

- Johnson & Johnson Vision Care
- AV2 material 30 & 90 packs
- BCR 8.4
- UV Blocker
- Powers +6 to -9
- Adds:

Low, Mid & High

## 1 day Acuvue Moist Multifocal






## 1 day Acuvue Moist MF Case

Case- 55yo currently in monthly multifocals

- OD -3.75-0.75X115, OS -5.75-0.25X147
  Add +2.25 Dominant eye OS
- Vertex, spherical equivalent
- OD -3.75, OS -5.50
- Lens selection: OD -3.75 High OS -5.50 Mid



## Center Distance Designs

*Center Distance Designs also used for Myopia Control

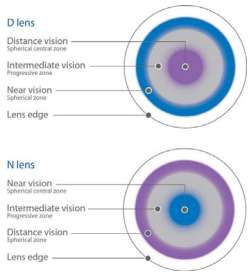


## Biofinity Multifocal

- CooperVision
- Monthly replacement
- Daily or extended wear
- Powers +6 to -10
- 4 add powers (+1.00, +1.50, +2.00, +2.50)
- Center Distance and Center Near lens
- BCR 8.6



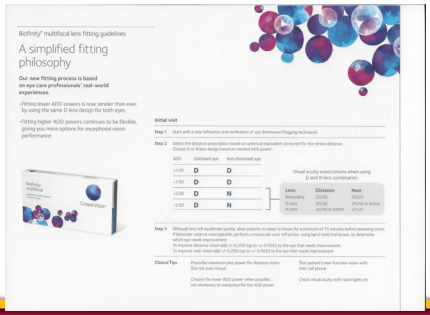
## Biofinity Multifocal Design




Courtesy of CooperVision



## Biofinity Fitting Guide



## Fitting Steps

- Determine from Refraction, Best Vision Sphere, adjust for vertex distance
- Determine dominant eye
- Evaluate at distance and near binocularly and then monocularly

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## Biofinity MF Case

59 year old OD -4.00, OS -4.50 Add +2.25
OD dominant eye
Vertex back OD -3.75, OS -4.25
OD lens -3.75 D lens +2.00 add
OS lens -4.25 N lens +2.oo add
Distance VA OD 20/20, OS 20/20, OU 20/20
Near VA a little blurry
Final lenses OD -3.75 D lens, +2.00 add, OS -4.00 N lens +2.50 add
Distance VA OD 20/20, OS 20/25, OU 20/20

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## Emerging Presbyopes

Case -44yo, previous soft lens distance only wearer
Currently taking glasses off to see near
Refraction OD -2.25-0.50X150 Add +1.25 Dominant eye
OS -2.75-0.25X15 Add +1.25

Biofinity MF OD -2.50 Add +1.00 D lens
OS -2.75 Add +1.50 D lens
VA 20/20+ OU distance, 20/20 OU Near

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## Proclear Multifocal and MF Toric

- CooperVision
- Same design as Biofinity Multifocal
- Daily wear
- BCR 8.7 Sphere, 8.4/8.8 Toric
- Proclear XR Multifocal: ±20, BCR 8.7
  - Adds +1.00 to +4.00 in 0.50D steps
- Proclear MF Toric: ±20, -0.75 to -5.75 cyl in 5 degree steps, +1.00 to +4.00 Adds
- Online calculator or call consultants

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## Proclear Multifocal Toric Case

Rx -3.50-2.00 X 10 OD
-3.50-1.50 X 170 OS
Add +1.75
Keratometry 44.00/46.00 OU
Dominant eye OD
Fit Proclear MF Toric
OD -3.50 -1.75X10 D lens Add +1.50
OS -3.50-1.25X170 N lens Add +1.50

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## Acuvue Oasys for Presbyopia

- Johnson & Johnson
- 2 week replacement
- Daily or Extended Wear
- Powers +6 to -9
- 3 add powers (Low, Mid & High)
- Aspheric Zonal Design-Center Distance
- BCR 8.4

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## Acuvue Oasys Add Selection

| Initial CL Add | Spectacle Add |
|---|---|
| Low add | ≤+1.25 |
| Mid | +1.50 to +1.75 |
| Mid dominant eye, High nondominant eye | +2.00 to +2.50 |

## Acuvue Oasys for Presbyopia

| Add power | First pair Dominant eye | First pair Non-dominant eye | Near complaint Dom eye | Near complaint ND eye | Distance complaint Dom eye | Distance complaint ND eye |
|---|---|---|---|---|---|---|
| +0.75-+1.25 | Low | Low | Low | Mid | Sphere only | Low |
| +1.50-+1.75 | Mid | Mid | Mid | Mid + 0.25 to sphere | Low | Mid |
| +2.00-+2.50 | Mid | High | Mid | High +0.25 to sphere | Mid | Mid +0.25 to sphere |

## NaturalVue Multifocal 1 day

- Visioneering Technology
- Neurofocus Optics Technology-uses extended depth of focus
- Add up to +3.00
- Powers +4.00 to -12.25
- BCR 8.3, Diameter 14.5
- 30 & 90 packs

## General MF Troubleshooting

- Poor distance VA – Add minus by 0.25 steps to dominant eye only &/or decrease add dominant eye
- Poor near VA – Add plus by 0.25 steps to non-dom eye &/or increase add non-dominant eye
- If ≥0.50D change is required in distance may need to alter add powers
- Use flippers for Over-refraction

## Troubleshooting Soft MF

- Address distance problem first
- Confirm dominant eye (especially if VA's don't meet expected values)
- Always recheck VA with an OR at distance & near
- Monocular acuities are useful for determining which lens may need to be altered
- Change power in small 0.25 steps
- Use the lowest add possible -Round down
- It is okay to use unequal adds

## Online calculators or apps

- CooperVision OptiExpert Fitting App-Available through app store

https://coopervision.com/practitioner/tools-and-calculators/optiexpert

- Johnson & Johnson Fitting Calculator

https://jnjinstitute.com/online-profed-resources/resources/acuvuer-multifocal-calculator

- Alcon CL Virtual Consultant

https://virtualconsultant.alcon.com/best_match.jsp

# Gas Permeable Bifocals/Multifocals

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## RULE OF THREE'S

- Number of Fits
- Patient Consultation
- Pre-Fit
- Fitting
- Problem-Solving

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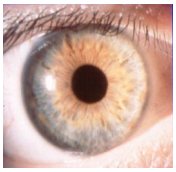
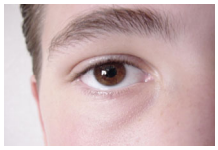
## PRE-FIT FACTORS

- Pupil Size
- Tear Film
- Lower Lid Position/tightness





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## DESIGNS IN COMMON USE

- Aspheric Multifocal
- Concentric/Annular
- Translating Segmented

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## Aspheric Advancements

- Has evolved into a very popular type due to advancements in technology
- New Technology resulting in better polished surfaces, & higher refractive index materials
- Addition of higher add power lenses
- Lower eccentricity lens designs
- Translation???

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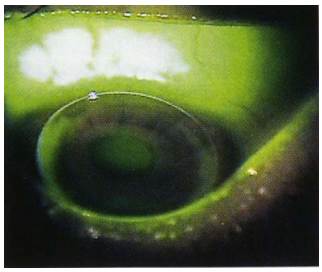
## Aspheric Translation



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## Aspheric Candidates

- Any Add Power (Don't R/O High)
- Computer use
- Athletes
- Low lower lid &/or loose lids
- Small-avg. pupil size
- (very) Critical Vision not essential

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## ASPHERIC MULTIFOCAL FITTING

- Front surface fit "On K" Back surface fit 1 - 1.5D steeper than K
- Must center with limited movement with the blink
- Easy to fit via manufacturers' fitting guide/user friendly
- Good design to start with

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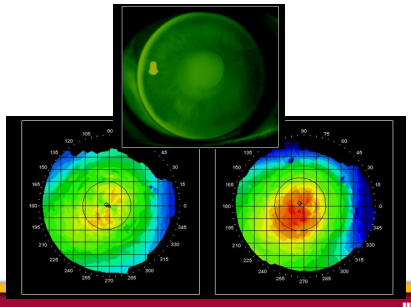
## Topographic Changes with Posterior Aspheric Lens Designs



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## FRONT SURFACE ASPHERIC MULTIFOCAL DESIGNS

- Have the benefit of avoiding back surface molding/topography changes
- Designs have variable add powers to meet patient needs: (i.e., often making effective center distance zone smaller with increase add power)

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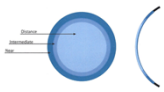
**Front Surface Technology**



MagniClear & MagniClear*plus*

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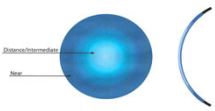
**Front Surface Technology**



Renovation & RenovationE

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## 'REAL WORLD ENVIRONMENT'

- Once the lenses have settled, have them perform relevant "real world" tasks (i.e., view SmartPhone, look at a computer, read a magazine, walk around the office to view at a distance, etc.).
- Woods et al(2009) c Air Optix Aqua Multifocal was preferred to monovision for "Real World" tasks: daytime & nighttime driving, watching TV

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## OVER-REFRACTION

Whereas monocular acuities at distance and near can be performed to assess vision, the over-refraction should be performed binocularly with the trial lens (often in the form of +/-0.25 and 0.50D flip lenses) over the eye demonstrating reduced visual acuity. WOW !!!!!!!!!

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## ASPHERIC TROUBLESHOOTING

- Inferior Decentration/Excessive Movement: Steeper Base Curve
- Insufficient Add Power:
  - Select Higher Add Lens Design
  - Use "Modified Bifocal"

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## EXCHANGE RATES: THE RESULTS OF A LARGE PRACTICE

- Practitioner DB: 710 GP multifocal lenses purchased over 3 years (10 patients/month)
- Average return rate of 42% (close to national average)

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## TRANSLATING VISION

- Prism Ballasted & often Truncated
- Crescent/Executive Seg
- High Dk Material
- Near image moves in front of pupil with downgaze
- Typically rests on or near the lower lid

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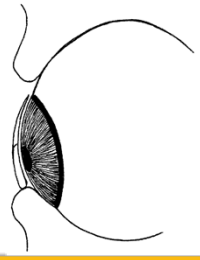
## Reading Position of Translating Bifocal

*Base Curve Selection (courtesy Firestone Optics)*

Proper base curve selection helps the lens to translate smoothly upward to position the seg line slightly above the pupil center during down gaze



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# TRANSLATING VISION: CANDIDATES

- Critical vision demands
- Any add powers (high add/limited IM)
- Lower lid near limbus/good tonicity
- Aspheric does not center
- Inferior Apex

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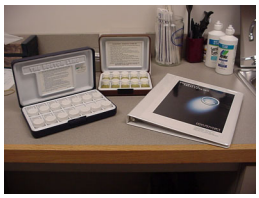
# FITTING NUGGETS

- Diagnostic set(s)
- Follow manufacturer's fitting guide
- Trial Lens O/R.
- Translating Pearls:
  - Position of lower lid to limbus
  - Seg line to lower pupil position
  - Evaluate translation in downward gaze



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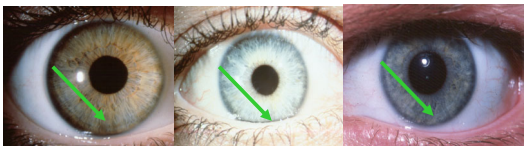
# Lid Position



Optimal **Okay** **???**

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# SOLUTIONS (X-CEL)

- One-piece crescent with monocentric optics
- Standard Lens = 9.6mm OAD; medium Prism; seg line 1mm below geometric center
  - +2.00D add, no truncation
  - User Friendly
  - Fit and seg position similar to Tangent Streak(BCR slightly flatter than "K"; seg line at lower pupil margin)

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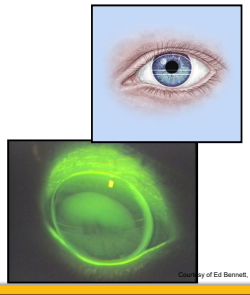
# Translating Designs Intermediate Need

- Examples:
  - Llevations Trifocal (Tru-Form)
  - Triune (Tru-Form)
  - Mandell Seamless (ABB-Concise)
  - Tangent Streak (ABB)
  - Presbylite (Lens Dynamics)
  - EZEyes (essilor)
  - Accent (Accu Lens)
  - ESSential Solutions (X-Cel)
- Modified Bifocal
- Over-Spectacles



Courtesy of Ed Bennett, O.D.

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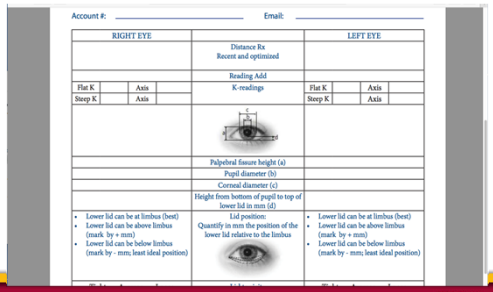
# Expert Progressive (Art Optical/Essilor)

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## Design Order Sheet (DOS)

| Right Eye | | Left Eye |
|---|---|---|
| -1.50 -0.75 cx 05 | Distance Rx | -1.50 -1.00 cx 180 |
| +2.00D | Reading Add | +2.00D |
| 44.00 / 45.00 @ 095 | K-readings | 43.50 / 45.00 @ 090 |
| a) HVID | | a) HVID |
| b) Pupil diameter |  | b) Pupil diameter |
| c) Lower lid height to lower pupil | | c) Lower lid height to lower pupil |
| d) Palpebral fissure width |  | d) Palpebral fissure width |
| Lid position | | Lid position |
| Tight, average, loose | Lid tonicity | Tight, average, loose |

## TRANSLATING VISION PROBLEM-SOLVING

- Excessive Rotation
- Lens Positions Too High
- No Lens Translation

## EXCESSIVE ROTATION

- Flatten Base Curve Radius by 0.50D
- Increase Prism 0.50PD

## LENS POSITIONS TOO HIGH

- Increase Prism by 0.50PD
- Flatten BCR 0.50D

## NO LENS TRANSLATION

- Flatten Base Curve by 0.50D
- Increase prism and/or truncation

## BLUR AT DISTANCE

- Lens too high: Increase prism
- Lens too low: Increase OAD
- Seg Height is too high
- Excessive movement

## Superior Flare

- Lens is too small
- Fit a larger lens to increase vertical height

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## BLUR AT NEAR

Seg height too low
No translation
Patient drops head to read, not eyes
Excessive lens rotation

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## PRESBYOPIC APPLICATIONS IN 2019

- GP Lens Designs
- Scleral Lens Designs
- Post Refractive Surgery Designs
- Hybrid/Combination Designs

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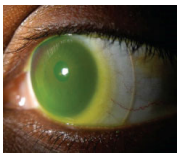
## Good Candidates for Scleral Multifocals (Woo, GSLS, 2015)

- Patients with irregular corneas, desiring more freedom from glasses
- Patients with REGULAR corneas
  - Offering the best of both worlds: Great vision and great comfort
- Patients with dry eye symptoms
- Post refractive surgery patients (RK, LASIK, etc)
  - These patients never wanted to wear glasses anyway!
  - Usually more motivated!



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## Poor Candidates for Scleral Multifocals

- Those with high/unreal expectations
- Patients with corneal scarring may have problems with glare/haloes/decreased vision
- Patients unwilling to learn a new modality of insertion and removal
- Patients who want to walk away with a multifocal TODAY

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## Scleral Multifocal Designs

- No translation required
- Most are concentric or aspheric designs
- Many scleral MF are center near, which have a similar design to other soft or GP designs
- Very customizable!
  - Changing diameter, base curve: no problem!
  - Some designs can adjust add power and zone size
  - Some designs available in toric or quadrant specific designs.

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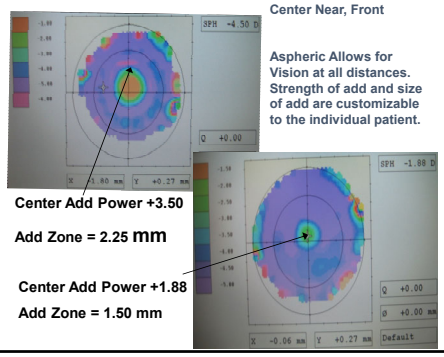
## So$_2$Clear Multifocal Lens (Dakota Sciences/Art Optical)




## PRESBYOPIC APPLICATIONS IN 2019

- GP Lens Designs
- Scleral Lens Designs
- Post Refractive Surgery Designs
- Hybrid/Combination Designs

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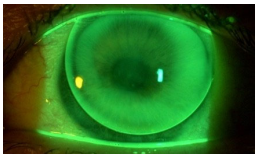
## POST-REFRACTIVE SURGERY MULTIFOCAL DESIGNS (Partial List)

- Typically reverse geometry designs with add on the front surface
- LasikNear (Valley Contax)
- Art Optical – CLASIKcn



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## PRESBYOPIC APPLICATIONS IN 2019

- GP Lens Designs
- Scleral Lens Designs
- Post Refractive Surgery Designs
- Hybrid/Combination Designs

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## Patient Candidates for Hybrid Multifocals

- Astigmatic presbyopes
- Soft multifocal patients with astigmatism
  - Great option since soft multifocals for astigmats is limited
- Soft toric monovision patients that want better vision
- Patients wanting to try the latest technology

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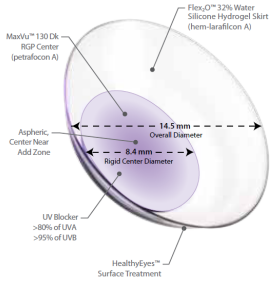
## Built on the Duette™ Platform

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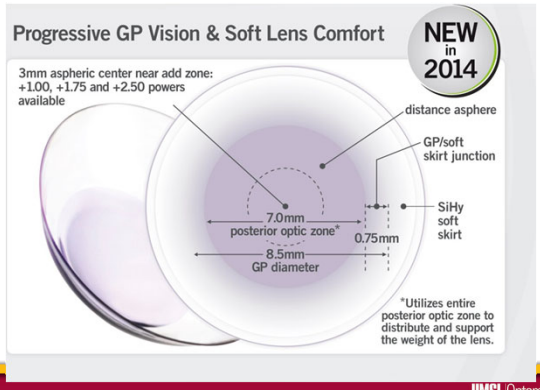
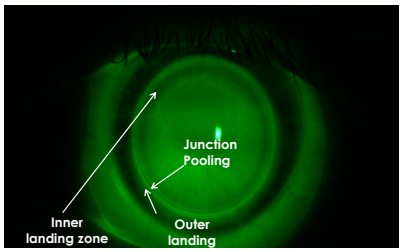



## Available Parameters

| | |
|---|---|
| Base Curves | 7.1mm to 8.3mm in 0.2mm steps |
| Skirt Curves | 8.7 (flat2), 8.4 (flat) and 8.1 (medium) |
| Lens Powers | +5.50D to -10.00D |
| Add Zone Size | 3.0mm |
| Add Powers | +1.00D, +1.75D and +2.50D |

## Skirt Determination – Ideal Fit

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## ISSUES & CONTROVERSIES

- THEY ARE NOT SUCCESSFUL
  - Numerous studies with 70 – 80+ success rate
  - With 56 different multifocal designs and 49 segmented translating designs (many with IM correction) they have to be successful (source: www.gpli.info)
- THEY ARE UNCOMFORTABLE
  - Have been found to be more initially comfortable than spherical lenses
  - Use of a topical anesthetic

## ISSUES & CONTROVERSIES

- THEY ARE TOO EXPENSIVE
- Order warranted
- Utilize your CLMA member laboratory consultant
- Remember: there are many tools available

## RESOURCES

- Your best resource is your laboratory consultant
- They can can provide diagnostic fitting sets, online resources for the fitting and troubleshooting of their designs, and well as very good advice based upon extensive experience
- If possible, topographies and photos can be beneficial as well

## IN SUMMARY

Presbyopes represent the greatest opportunity for contact lens practice growth

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