

IOLs of the Future, Will they Provide Accommodation

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Introduction

- What do patients want
- What is different about the 2010 cataract patient
- Visual demands of the Cataract patient

Neuroadaptation

- How does it occur
- Why is it necessary

Optical Changes of the Crystalline lens

- Aberrations in 25 year old
- Aberrations in 65 year old
- Aberrations in traditional IOL
- Options to correct aberrations

Contrast Sensitivity and Cataracts

- Pupil size and cataracts
- Measurement of contrast sensitivity
- Affects of decreased contrast sensitivity

Identifying Candidates for Premium IOLs

- Age
- Occupation
- Hobbies
- Personality

Clinical Evaluation for Premium IOLs

- Ocular surface
- Retina
- Glaucoma

Lens Options

- Toric
- Diffraction
- Accommodative
- Dual Optics

Toric IOLs

- Best candidates
- Lens parameters
- Lens limitations
- FDA data

Tecnis

- Best candidates
- Lens parameters
- Lens limitations
- FDA data

ReSTOR

- Best candidates
- Lens parameters
- Lens limitations
- FDA data

Crystalens

- Best candidates
- Lens parameters
- Lens limitations
- FDA data

Future Lenses

- Synchrony Lens
 - Optical technology
 - Clinical advantages / disadvantages
- TetraFlex Lens
 - Optical technology
 - Clinical Advantages / disadvantages
- Femtosecond in Cataract Surgery
 - Clinical application

Learning Objectives

- Understand the needs of the premium IOL patient
- Understand the current options available for accommodative lenses
- Understand the limitations of the current options for accommodative lenses
- Understand the process for patient selection for current lenses
- Understand the technological differences of the lenses in clinical trial
- Understand how the surgical technique will change with new lenses